I searched the island again on February 28, but could find no trace of Bearded Tits. Mr. A. E. Jones visited the island on January 16, 1927, with some friends, one of whom saw and described a bird that may have been a Bearded Tit. Mr. B. B. Osmaston on my suggestion has also searched the reed beds of the Kabul River near Peshawar without finding any trace of the species. At present therefore it is difficult to say whether the birds I saw were residents or stragglers from further north. It is usually regarded as a strictly sedentary species and it very easily escapes notice from the nature of its habitat so I still hope that ultimately it may be found to be a resident in the extreme north-west of India.

The specimens procured belong to the pale eastern race *Panurus viarmicus russicus* of which there is a good series in the British Museum from E. and W. Turkistan (Ferghana, Tianshan, Yarkand, Lobnor) and Mongolia; these are the nearest localities to Attock in which the species has been hitherto recorded and it is difficult to see how birds of this type could have crossed the Karakorum into the watershed of the Indus as mere stragglers. They are known to be

resident in the swamps of Turkistan.

BATTLE, SUSSEX, February 11, 1927.

HUGH WHISTLER.

## XIX.—OCCURRENCE OF THE PAMIR HORNED LARK (OTOCORIS PENCILLATA ALBIGULA) IN THE PUNJAB

On March 1, 1926, I was motoring into Rawalpindi from the direction of Attock when we disturbed a Horned Lark which was feeding on the road about 2.30 p.m. This was between Serai Kala and the Nicholson monument at Margala at an altitude of about 1,800–1,900′. It settled on barren ground at the side of the road and we stopped the car and went back to look for it. It was fairly tame and allowed me to get within 10 or 15 yards of it several times, merely rising and flying round with a strong rather swaying flight to settle again in the vicinity. The unbroken black gorget was very marked in life. I secured the bird and found it to be a fine male of the Pamir Horned Lark Otocoris penicillata albigula which is said to swarm in winter in Gilgit down to about 5,000′, but does not seem to have been procured south of that locality.

BATTLE, SUSSEX, November 2, 1927.

HUGH WHISTLER.

## XX.-THE ROCK-SPARROW (PETRONIA STULTA) IN THE PUNJAB

When writing in vol. xxx of our Journal on the Finches of the Punjab I was unable to include the Rock-sparrow in my list as all the Iudian records related to localities north and west of the Provincial boundary. It may now, however,

be included in the Punjab list.

On December 30, 1925, I was staying at Attock and walked down to the edge of the Indus from the Public Works Department Rest House that overlooks the river. On the patch of rough sandy ground studded with Bir trees that lies at the foot of the Rest House knoll I disturbed a party of twelve to fifteen birds which flew down and settled amongst the reef-like rocks that line the shore of the river. They were rather shy and rose and settled again two or three times amongst the rocks before flying away to the hills behind the Rest House. Although I failed to secure a specimen I had a good view of the party with the glasses and was satisfied that they were Rock-Sparrows a species that I know well in Spain, Corsica, and the Pyrenees.

Battle, Sussex, November 2, 1927.

HUGH WHISTLER.

## XXI.—THE MATING OF PAROQUETS

On the morning of February 27, at Cambay, I had the opportunity of observing for the first time a pair of the Rose-ringed Paroquet (*Psittacula torquata*) in copulation, and in view of the extraordinary antics indulged in by the birds—especially the cock—I think the following note will prove of interest.

I was staying in a somewhat crowded and antiquated part of the town, where the holes in the ancient walls provided excellent nesting sites for Mynas—Common, Bank and Brahminy—besides numerous Rose-ringed Paroquets. Close to my window was an electric wire post and on this the sundry occupants

of the holes were to be seen at all hours of the day.

On the present occasion a pair of paroquets were sitting on the cable close to one another paying delicate attentions in the way of tickling each others heads and so on. In a little while the male sidled up closer to the female who responded by squatting herself flat, neck extended in front, flattening her back by slightly opening and raising her wings. The cock-bird now complacently climbed on to the hen's back with the help of his beak and there commenced a series of some extremely odd proceedings, difficult to describe. At first he kept to the left side of the females back only and commenced jerking his head up and down so that at each downward stroke of the head the culmen of his beak rubbed against the left side of the hen's head. After twenty jerks or so in this manner, he stepped over to the right half of the female's back and the jerking of the head was repeated, this time the culmen stroking the right side of her head. In the course of these proceedings the female frequently turned her head round and touched the cock's beak with hers.

This performance continued for fully five minutes. The cock now shifted himself to the centre of his spouse's back and with his wings open and drooping low on either side of her, tilted himself backward and the act was accomplished. During the half hour I was watching the pair, copulation took place thrice,

During the half hour I was watching the pair, copulation took place thrice, the birds moving off a little distance after each act, and sidling up again after a while. The last two 'transactions' occupied a much shorter time than the first.

It would appear that early morning is the time selected by the birds for this phase of their nesting operations, as though they kept to the neighbourhood throughout the day, no more of the business was noticed.

BOMBAY NATURAL HISTORY SOCIETY,

SALIM A. ALI.

6, APOLLO STREET, March 1, 1927.

## XXII.—HABITS OF THE INDIAN SPUR-WINGED PLOVER (HOPLOPTERUS VENTRALIS)

1. Protective devices.—The Indian Spur-winged Plover haunts the sands in river beds. It has the plover-like habit of making forward rushes, then short

halts during which it often stands on one leg.

It makes remarkable use of its protective colouring and behaves as if it understood the advantage of its dress. The following are the parts of its colouration which concern us. Its back is sandy brown, under parts white, crown black with a long crest throat with a black patch, wings largely black and white. The black and white of the wings would be very conspicuous were it not that when folded these colours are hidden by the inner coverts which are coloured light brown.

A bird clothed in this striking dress is certainly very obvious when in flight. It is equally conspicuous against a dark background or when standing on green grass. But the spur-wing keeps mainly to river beds, and so conducts itself in the face of danger that its colours blend remarkably with the sand. At the edge of the water it is conspicuous enough, for the sand is there wet and dark owing to the moisture sucked into it from the stream. And the spur-wing seems to know that the edge is dangerous, for, on my approach, it runs inward to the drier area where its light brown plumage blends with the paler sand.

Let us approach closer and watch how the bird behaves. It reaches the paler tract of sand, then halts, bends its legs, dips its head, depresses it crest, and lowers its body close to the ground. Its gait, if it moves, is very stealthy, and it is obviously trying to make itself look small. Sometimes it crouches very low and flattens its body down on the sand. Perhaps it may find a small hollow in which it can conceal itself completely from view. Thus the spur-wing seems to know that it must make itself inconspicuous, that its safety is secured by blending with the sand.

Other plovers adopt this ruse. The Little Ringed Plover, Ægialitis dubia, for instance, sometimes crouches in a similar way. It likes sandy places and is protectively coloured. Hence crouching conceals it in the same way as it

does the spur-wing.